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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,327	08/01/2005	Hong Linh Truong	CH920020023US1	9108
54856	7590	06/16/2008		
LOUIS PAUL HERZBERG 3 CLOVERDALE LANE MONSEY, NY 10952			EXAMINER KASSA, ZEWDU A	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 06/16/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/519,327

Applicant(s)

TRUONG ET AL.

Examiner

ZEWDU KASSA

Art Unit

2611

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 30 Nov 2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Varma (US 6643322 B1) in view of Mahany (US 5862171) and Mayer (2002/0145976 A1).
3. As per claim 1, Varma teaches a method for adapting a transmission parameter in a transmitting node of a data communication system (Varma, Col 1 L52-53, Fig. 1 item 1) to the current link quality of a data communication channel (Varma, Col 1 L24-28) the adapted transmission parameter (Varma, Col 1 L18-22) being selected by the transmitting node from a set of transmission parameters (Varma, Col 2 L40-42) in dependence on a number of successful transmissions (Varma, Fig. 5 item S501), the number of successful transmissions being compared (Varma, Fig. 5 item S501) in the transmitting node against one of a first value corresponding to a first state of the transmitting node and a second value corresponding to a second state of the transmitting node, the method comprising in the

transmitting node the steps of (Varma, Col 1 L55-58 – Two set of parameters have been used the first set for first state and second set for second state.): counting the number of successful transmissions (Varma, Fig. 5 item S502, Abstract L15-17 “determined by monitoring ... a number of ACK messages that occur”); selecting the adapted transmission parameter (Varma, Col 2 L40-42) in response to the number of successful transmissions equaling or exceeding the first value when the transmitting node is in the first state (Varma, Col 6 L36-41, Fig. 4, Fig. 5) and in response to the number of successful transmissions equaling or exceeding the second value when the transmitting node is in the second state (Varma, Col 6 L30-35, Fig. 4, Fig. 5); and in dependence of the success or failure of a subsequent transmission, operating the transmitting node in one of the first state and the second state (Varma, Col 7 L16-18), wherein the step of operating the transmitting node in the second state further comprises in the event of a faulty transmission transitioning to the first state, and further comprising (Varma, Abstract, Fig. 4, Fig. 5): setting the first value (Varma, Abstract “first predetermined threshold”) to 3 (not in Varma but would have been obvious as explained below) and the second value (Varma, Col 5 L45-55 “second threshold”) to 10 (not in Varma but would have been obvious as explained below); counting a number of faulty transmissions and selecting the adapted transmission parameter in dependence of a threshold of the

number of faulty transmissions (Varma, Fig. 5 item S501, Abstract "determined by monitoring a number of NACK messages ... that occur"); setting the threshold or the number faulty transmissions (Varma, Fig. 5 item S501) to 1; and selecting the transmission parameter used by a responding receiver (Varma, Col 2 L40-42, Fig. 1 item 2, Col 3 L33-43); wherein the step of selecting the adapted transmission parameter further comprises selecting a different data rate , and (Varma, Col 1 L18-22) wherein the step of selecting the adapted transmission parameter further comprises selecting a packet length different to the length used before (not in Varma but would have been obvious as explained below).

4. Varma does not teach wherein the step of selecting the adapted transmission parameter further comprises selecting a packet length different to the length used before. Mahany teaches wherein the step of selecting the adapted transmission parameter further comprises selecting a packet length different to the length used before (Mahany, Abstract L19-21 "determining weather to modify current packet sizes"). Thus, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to arrive at wherein the step of selecting the adapted transmission parameter further comprises selecting a packet length different to the length used before as recited by the instant claim. Furthermore, one of ordinary skill in

the art, would have been motivated to combine the teachings of Varma with Mahany because Varma teaches and suggests selecting different dynamic adaptation link parameters such as modulation scheme, symbol rate, error correction scheme and the like based on the channel(link) quality measurement for better throughput efficiency (Varma, Col 1 L18-22, L29-34, Abstract, Col 5 L16-26) and Mahany teaches and suggests the benefit of using communication link adaptive parameters such as to determine whether to modify current data packet sizes based on the channel(link) quality measurement for better quality of transmission or throughput efficiency in the analogous art of communication system, particularly in adaptation of link parameters (Mahany, Abstract).

5. Varma in view of Mahany does not teach to 3, to 10, to 1. Mayer teaches to 3, to 10 (Mayer, para [0015], [0011], [0012], Abstract), to 1 (Mayer, Fig. 1 item S2). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Mayer into Varma in view of Mahany since Varma in view of Mahany teaches dynamic link adaptation based on comparing the number of ACK or NACK received from a receiver with a threshold value to measure the link quality for a better throughput efficiency and Mayer teaches the beneficial use of setting the threshold value related to successful ACK larger

than three and also comparing acknowledgment failure to one to achieve such as a more accurate link quality measurement result in order to adapt the correct link parameters to control the flow of data between transmitter and receiver (Mayer, Abstract, para [0015], [0011], [0012])

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU KASSA whose telephone number is (571)270-5253. The examiner can normally be reached on Monday - Friday (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571 272 3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2611

ZK

/David C. Payne/
Supervisory Patent Examiner, Art Unit 2611